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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/548,377	04/12/2000	Satoko Tonegawa	13458 (JP9 1999-0060)	5409

7590 01/29/2004

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EXAMINER

DASTOURI, MEHRDAD

ART UNIT	PAPER NUMBER
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2623

DATE MAILED: 01/29/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/548,377

Applicant(s)

TONEGAWA ET AL.

Examiner

Mehrdad Dastouri

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Applicants' amendment filed September 2, 2003, has been entered and made of record.
2. Objection to the specification has been withdrawn in view of Applicants' amendment.
3. 35 U. S. C. 112, second paragraph rejection of Claims 17-19 has been withdrawn in view of Applicants' remarks and amendment. However, the amendment resulted in new subject matter for Claims 1, 2, 16, 17 and 19.

Claim Rejections - 35 USC § 112

4. Claims 1, 2, 16, 17 and 19 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 1, 2, 16, 17 and 19 recite "a plurality of second data blocks having second embedding data", that does not exist in the specification at the time the application was filed. The specification has been simultaneously amended by the instant amendment to include the same new matter of "second data blocks having second embedding data".

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S. C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351 (a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-19 are rejected under 35 U.S. C. 102(e) as being anticipated by Bhaskaran et al., (hereinafter Bhaskaran), US 6,064,764.

As per claim 1, Bhaskaran teaches: a contents data dividing means for dividing at least part of the contents data into a plurality of first blocks (Abstract; Figure 1; col. 2, lines 63-67); and a data filling means for filling each of certain first embedding data to each of said divided first data blocks to generate a plurality of second blocks (Abstract; Figures 1 and 2; col. 3, line 67, col. 4, lines 1-17) having second embedding data (hash value of each block), said detection apparatus, comprising: a data extracting means for extracting said second embedding data filled in each of at least a part of said second data blocks (Abstract; Figures 2-4; col. 3. lines 18-27); and an alteration detecting means for detecting whether or not alteration was added to each of at least a part of said second d blocks based on said extracted second embedding data (Abstract; Figures 2-4; col. 3. lines 27-35), and an altered position indication means for indicating the positions occupied by said second image blocks of which added alteration was detected (Abstract; Figures 2-4; col. 3. lines 18-35).

As per Claim 2, it recites the same limitations as Claim 1 above except it is directed to image data instead of content data, which is taught by Bhaskaran, (Figure 1; Abstract); therefore, the remarks above rejecting claim 1 are applicable to claim 2.

As per claim 3, Bhaskaran teaches:

said image dividing means divides said image data into said plurality of first image blocks containing a plurality of unit data respectively (col. 3, lines 1-8); and said data filling means adjusts a relationship between or among a mutually corresponding plurality of said unit data values contained in each of mutually corresponding two or more of said first image blocks so that it represents said first embedding data according to a certain rule, filling said first embedding data to each of said plurality of first image blocks to generate said second image blocks (Figures 1-5; Abstract; col. 3, lines 1-35; col. 5, line 34 through col. 7, line 25).

In keeping with the examiners interpretation explained above in the 35 U. S. C. 112, second paragraph rejection of Claim 4, Bhaskaran teaches:

wherein said data filling means, in the case that alteration was added to any of said second image blocks, adjusts said mutually corresponding plurality of unit data values contained in said second image blocks to which alteration was added so that said values do not comply with said certain rule (Figures 1-5; Abstract; col. 3, lines 1-35; col. 5, line 34 through col. 7, line 25), where Bhaskaran teaches that the watermark is verified on a block by block basis, so it is inherent that Bhaskaran could tell which blocks were altered.

As per claim 5, Bhaskaran teaches:

wherein said data extracting means extracts as said second embedding data, from each of said plurality of second image blocks, the data represented by the relationship between or among said plurality of unit data values contained in each of

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said second image blocks according to a certain rule (Figures 1-5; Abstract; col. 3, lines 1-35; col. 5, line 34 through col. 7, line 25).

As per claim 6, Bhaskaran teaches:

wherein said alteration detecting means detects whether alteration was added to each of said second image blocks or not based on results of comparison between said embedded first embedding data and said extracted second embedding data (Figures 1-5; Abstract; col. 3, lines 1-35; col. 5, line 34 through col. 7, line 25).

As per claim 7, Bhaskaran teaches:

wherein said first image blocks and said second image blocks are conversion blocks that contain said unit data, and also contain one or more sets of conversion coefficients acquired by dividing image data into certain processing blocks and converting it from a space area into a frequency area, respectively (Figures 1-5; Abstract; col. 3, lines 1-35; col. 5, line 34 through col. 7, line 25).

As per Claim 8, it recites substantially the same limitations as Claim 7 above and analogous remarks apply because the specification defines unit data as DCT coefficients.

As per Claim 9, it recites broad limitations of an image dividing means and a data filling means that are substantially the same as the limitations addressed in Claims 1 and 2 above and analogous remarks apply.

As per Claim 10, it recites broad limitations of an image dividing means, a data filling means and the adjusting relationships feature that are substantially the same as the limitations addressed in Claims 1, 2 and 3 above and analogous remarks apply.

As per claim 11, it recites substantially the same limitations as Claim 4 above and analogous remarks apply.

As per Claim 12, it recites broad limitations of an alteration detection means and a data extracting means that are substantially the same as the limitations addressed in Claims 1 and 2 above and analogous remarks apply.

As per Claim 13, it recites broad limitations of an image dividing means and a data extracting means that are substantially the same as the limitations addressed in Claims 3 and 5 above and analogous remarks apply.

As per Claim 14, it recites broad limitations of the content alteration detection means and "in the case that alteration was added" feature that are substantially the same as the limitations addressed in Claims 1 and 4, respectively, above and analogous remarks apply.

As per Claim 16, it recites substantially the same limitations as Claim 1 above and analogous remarks apply.

As per Claims 17, 18 and 19, it recites substantially the same limitations, but broader limitations, or a combination of the limitations as Claim 2 above and analogous remarks apply.

Other Prior Art Cited

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent 6,037,984 to Isnardi et al.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Contact Information

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mehrdad Dastouri whose telephone number is (703) 305-2438. The examiner can normally be reached on Monday to Friday from 8:00 a.m. to 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amelia Au can be reached on (703) 308-6604.

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The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center Customer Service Office whose telephone number is (703) 306-0377.

MEHRDAD DASTOURI
PRIMARY EXAMINER

Mehrdad Dastouri

Mehrdad Dastouri
Primary Examiner
Group Art Unit 2623
January 26, 2004